

WHAT IS CLAIMED IS:

1. A method for managing accessibility of fabric devices from a host system, comprising:

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storing a plurality of configuration repositories, wherein each one of said plurality of configuration repositories identifies one or more fabric devices;

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receiving a request to online fabric devices according to a specified one of said plurality of configuration repositories;

accessing the specified configuration repository; and

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requesting a configuration operation to online, for the host system, one or more of the fabric devices identified in the specified configuration repository.

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2. The method as recited in claim 1, wherein said requesting a configuration operation comprises requesting a fabric driver to create an operating system node for each identified fabric device not already online and requested to be brought online.

3. The method as recited in claim 1, wherein said requesting a configuration operation comprises:

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indicating a desired configuration status for each fabric device identified in the specified configuration repository;

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requesting a fabric driver to create an operating system node for each identified fabric device not already online whose desired configuration status is configure; and

requesting a fabric driver to deactivate or delete an operating system node for each
identified fabric device whose desired configuration status is unconfigure.

4. The method as recited in claim 3, further comprising, in response to said
5 requesting a fabric driver to deactivate or delete an operating system node:

receiving a warning that one of the identified fabric devices whose desired
configuration status is unconfigure is in-use for the host system; and

10 in response to said receiving a warning, canceling deactivation or deletion of the
operating system node for the in-use fabric device.

5. The method as recited in claim 1, wherein said requesting a configuration
operation comprises requesting a fabric driver to verify the availability of each identified
15 fabric device on the fabric.

6. The method as recited in claim 1, further comprising creating one of said
configuration repositories by:

20 receiving a request for a list of fabric devices available to a host system;

providing said list in response to the request;

receiving an indication of selected fabric devices from said list; and

25 creating one of said plurality of configuration repositories for identifying the
selected fabric devices.

7. The method as recited in claim 6, wherein said creating one of said
30 configuration repositories further comprises requesting a configuration operation to

configure for the host system the selected fabric devices from said list according to their indicated desired configuration status.

8. The method as recited in claim 6, wherein said providing said list
5 comprises obtaining said list from a fabric driver.

9. The method as recited in claim 6, wherein said providing said list
comprises displaying said list to a user.

10. The method as recited in claim 1, further comprising modifying one of
10 said configuration repositories by:

providing entries from a specified one of said configuration repositories;

15 receiving a request to delete an entry for one of the fabric devices identified in the
specified configuration repository; and

in response to said request to delete, updating the specified one of said
configuration repositories to delete said entry.

20 11. The method as recited in claim 1, further comprising modifying one of
said configuration repositories by:

providing entries from a specified one of said configuration repositories;

25 receiving a request to change the desired configuration status for one of the fabric
devices identified in the specified configuration repository; and

in response to said request to change the desired configuration status, updating the specified one of said configuration repositories to indicate the requested change to the desired configuration status.

5 12. The method as recited in claim 11, wherein said modifying one of said configuration repositories further comprises requesting a fabric driver to verify the availability on the fabric of each fabric device identified in the modified configuration repository.

10 13. The method as recited in claim 11, wherein said modifying one of said configuration repositories further comprises requesting a fabric driver to create an operating system node for each fabric device not already online whose desired configuration status is configure.

15 14. The method as recited in claim 1, further comprising modifying one of said configuration repositories by:

providing a list of fabric devices available to the host system;

20 receiving an indication of one or more selected fabric devices from said list with desired configuration status for each selected fabric device to be added to a specified one of said configuration repositories; and

25 updating the specified one of said configuration repositories to add entries for each selected fabric device.

30 15. The method as recited in claim 14, wherein said modifying one of said configuration repositories further comprises requesting a fabric driver to verify the availability on the fabric of each fabric device identified in the modified configuration repository prior to said updating.

16. The method as recited in claim 14, wherein said modifying one of said configuration repositories further comprises requesting a fabric driver to create an operating system node for each fabric device not already online whose desired
5 configuration status is to be configured for the modified configuration repository.

17. The method as recited in claim 1, wherein one of said plurality of configuration repositories is a persistent repository indicating a default fabric device configuration for the host system.

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18. The method as recited in claim 17, further comprising, in response to a reboot of the host system, reading said persistent repository and requesting a configuration operation to configure for the host system the fabric devices identified in the persistent repository according to said default fabric device configuration.

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19. A host system, comprising:

one or more ports for coupling to a fabric;

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a fabric driver configured to interface the host system to the fabric;

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a fabric configuration interface configured to manage a plurality of different configuration repositories, wherein each one of said configuration repositories indicates a specific fabric device configuration for the host system;

wherein said fabric configuration interface is configured to provide a standard interface for creating said configuration repositories; and

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wherein said fabric configuration interface is configured to provide a standard

interface for requesting a configuration operation according to a specified one of said configuration repositories.

20. The host system as recited in claim 19, wherein said fabric configuration
5 interface is further configured to initiate said configuration operation according to said specified configuration repository by requesting said fabric driver to create an operating system node for each fabric device identified in the specified configuration repository that is desired to be configured.

10 21. The host system as recited in claim 19, wherein said fabric configuration interface is further configured to initiate said configuration operation according to said specified configuration repository by requesting said fabric driver to delete or deactivate an existing operating system node for each fabric device identified in the specified configuration repository that is desired to be unconfigured.

15 22. The host system as recited in claim 21, wherein:

said fabric driver is configured to, in response to a request to deactivate or delete
an existing operating system node, generate a warning that a fabric device
20 whose node was requested to be deleted or deactivated is in-use for the host system; and

said fabric configuration interface is configured to, in response to receiving said
warning, cancel the deactivation or deletion of the operating system node
25 for the in-use fabric device.

23. The host system as recited in claim 19, wherein said fabric configuration
interface is configured to provide a standard interface for verifying the availability of each
fabric device identified in a specified one of said configuration repositories.

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24. The host system as recited in claim 23, wherein said standard interface for verifying is configured to, in response to a verification request specifying one of said configuration repositories, request said fabric driver to verify the availability on the fabric of the fabric devices identified in the specified configuration repository.

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25. The host system as recited in claim 24, wherein said fabric driver is configured to, in response to said request to verify, access a fabric name server to determine availability of the fabric devices identified in the specified configuration repository.

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26. The host system as recited in claim 24, wherein if one of the fabric devices is determined not to be available in response to said verification request, said fabric configuration interface is configured to obtain a list of available fabric devices from the fabric driver for selecting a replacement for the unavailable fabric device.

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27. The host system as recited in claim 19, wherein said standard interface for creating said configuration repositories is configured to:

receive a request for a list of fabric devices available to the host system;

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obtain said list from said fabric driver;

receive an indication of selected fabric devices from said list with desired configuration status for each selected fabric device; and

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create one of said configuration repositories identifying the selected fabric devices.

28. The host system as recited in claim 27, wherein said standard interface for creating said configuration repositories is configured to display said list to a user.

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29. The host system as recited in claim 19, wherein said fabric configuration interface is configured to provide a standard interface for modifying said configuration repositories, wherein said standard interface for modifying is configured to:

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receive a request to delete an entry for one of the fabric devices identified in a specified configuration repository; and

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in response to said request to delete, update the specified one of said configuration repositories to delete said entry.

30. The host system as recited in claim 19, wherein said fabric configuration interface is configured to provide a standard interface for modifying said configuration repositories, wherein said standard interface for modifying is configured to:

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obtain a list of fabric devices available to the host system;

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receive an indication of one or more selected fabric devices from said list with desired configuration status for each selected fabric device to be added to a specified one of said configuration repositories; and

update the specified one of said configuration repositories to add entries for each selected fabric device.

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31. The host system as recited in claim 19, wherein one of said plurality of configuration repositories is a persistent repository indicating a default fabric device configuration for the host system.

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32. The host system as recited in claim 31, wherein said fabric configuration interface is further configured to, in response to a reboot of the host system, access said

persistent repository and request said fabric driver to configure for the host system the fabric devices identified in the persistent repository according to said default fabric device configuration.

5 33. A computer readable medium having stored thereon data representing sequences of instructions, wherein the sequences of instructions are executable by one or more processors to implement:

10 storing a plurality of configuration repositories, wherein each one of said plurality of configuration repositories identifies one or more fabric devices;

 receiving a request to online fabric devices according to a specified one of said plurality of configuration repositories;

15 accessing the specified configuration repository; and

 requesting a configuration operation to online, for the host system, one or more of the fabric devices identified in the specified configuration repository.

20 34. The computer readable medium as recited in claim 33, wherein said requesting a configuration operation comprises requesting a fabric driver to create an operating system node for each identified fabric device not already online and requested to be brought online.

25 35. The computer readable medium as recited in claim 33, wherein said requesting a configuration operation comprises:

 indicating a desired configuration status for each fabric device identified in the specified configuration repository;

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requesting a fabric driver to create an operating system node for each identified fabric device not already online whose desired configuration status is configure; and

5 requesting a fabric driver to deactivate or delete an operating system node for each identified fabric device whose desired configuration status is unconfigure.

36. The computer readable medium as recited in claim 35, wherein the sequences of instructions are further executable to implement, in response to said
10 requesting a fabric driver to deactivate or delete an operating system node:

receiving a warning that one of the identified fabric devices whose desired configuration status is unconfigure is in-use for the host system; and

15 in response to said receiving a warning, canceling deactivation or deletion of the operating system node for the in-use fabric device.

37. The computer readable medium as recited in claim 33, wherein said requesting a configuration operation comprises requesting a fabric driver to verify the
20 availability of each identified fabric device on the fabric.

38. The computer readable medium as recited in claim 33, wherein the sequences of instructions are further executable to implement creating one of said configuration repositories by:

25 receiving a request for a list of fabric devices available to a host system;

providing said list in response to the request;

30 receiving an indication of selected fabric devices from said list; and

creating one of said plurality of configuration repositories for identifying the selected fabric devices.

5 39. The computer readable medium as recited in claim 38, wherein said creating one of said configuration repositories further comprises requesting a configuration operation to configure for the host system the selected fabric devices from said list according to their indicated desired configuration status.

10 40. The computer readable medium as recited in claim 38, wherein said providing said list comprises obtaining said list from a fabric driver.

15 41. The computer readable medium as recited in claim 38, wherein said providing said list comprises displaying said list to a user.

 42. The computer readable medium as recited in claim 33, wherein the sequences of instructions are further executable to implement modifying one of said configuration repositories by:

20 providing entries from a specified one of said configuration repositories;

 receiving a request to delete an entry for one of the fabric devices identified in the specified configuration repository; and

25 in response to said request to delete, updating the specified one of said configuration repositories to delete said entry.

30 43. The computer readable medium as recited in claim 33, wherein the sequences of instructions are further executable to implement modifying one of said configuration repositories by:

providing entries from a specified one of said configuration repositories;

receiving a request to change the desired configuration status for one of the fabric
5 devices identified in the specified configuration repository; and

in response to said request to change the desired configuration status, updating the
specified one of said configuration repositories to indicate the requested
change to the desired configuration status.

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44. The computer readable medium as recited in claim 43, wherein said
modifying one of said configuration repositories further comprises requesting a fabric
driver to verify the availability on the fabric of each fabric device identified in the
modified configuration repository.

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45. The computer readable medium as recited in claim 43, wherein said
modifying one of said configuration repositories further comprises requesting a fabric
driver to create an operating system node for each fabric device not already online whose
desired configuration status is configure.

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46. The computer readable medium as recited in claim 33, wherein the
sequences of instructions are further executable to implement modifying one of said
configuration repositories by:

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providing a list of fabric devices available to the host system;

receiving an indication of one or more selected fabric devices from said list with
desired configuration status for each selected fabric device to be added to a
specified one of said configuration repositories; and

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updating the specified one of said configuration repositories to add entries for each selected fabric device.

47. The computer readable medium as recited in claim 46, wherein said
5 modifying one of said configuration repositories further comprises requesting a fabric driver to verify the availability on the fabric of each fabric device identified in the modified configuration repository prior to said updating.

48. The computer readable medium as recited in claim 46, wherein said
10 modifying one of said configuration repositories further comprises requesting a fabric driver to create an operating system node for each fabric device not already online whose desired configuration status is to be configured for the modified configuration repository.

49. The computer readable medium as recited in claim 33, wherein one of said
15 plurality of configuration repositories is a persistent repository indicating a default fabric device configuration for the host system.

50. The computer readable medium as recited in claim 49, wherein the
20 sequences of instructions are further executable to implement, in response to a reboot of the host system, reading said persistent repository and requesting a configuration operation to configure for the host system the fabric devices identified in the persistent repository according to said default fabric device configuration.